

# INPATIENT QUALITY INDICATORS™ v2019 ICD-10-CM/PCS BENCHMARK DATA TABLES

#### **Prepared for:**

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#### Introduction

The data presented in this document are nationwide comparative rates for Version 2019 of Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Inpatient Quality Indicators (IQI) software. The numerators, denominators and observed rates shown in this document are based on an analysis of discharge data from the 2016 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).

HCUP is a family of healthcare databases and related software tools and products developed through a Federal-State-industry partnership. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. The SID contains all-payer, encounter-level information on inpatient discharges, including clinical and resource information typically found on a billing record, such as patient demographics, up to 30 *International Classification of Diseases, Tenth Revision, Clinical Modification/Procedural Classification System (ICD-10-CM/PCS)* diagnoses and procedures, length of stay, expected payer, admission and discharge dates, and discharge disposition. In 2016, the HCUP databases represented more than 97 percent of all annual discharges in the United States.

The analytic dataset used to generate the tables in this document consists of the same hospital discharge records that comprise the reference population for Version 2019 of the AHRQ QI software. This reference population file was limited to community hospitals and also excludes rehabilitation and long-term acute care (LTAC) hospitals. Information on the type of hospital was obtained by the American Hospital Association (AHA) Annual Survey of Hospitals. AHA defines community hospitals as "all non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of institutions." Included among community hospitals are specialty hospitals such as obstetricsgynecology, ear-nose-throat, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers.

In 2016, 45 states of the SID include indicators of the diagnoses being present on admission (POA) and included the PRDAY data element. Discharges from these 45 participating States are used to develop hospital-level indicators. Edit checks on POA were developed during an HCUP evaluation of POA coding in the 2011 SID at hospitals that were required to report POA to CMS (<a href="http://www.hcup-us.ahrq.gov/reports/methods/2015-06.pdf">http://www.hcup-us.ahrq.gov/reports/methods/2015-06.pdf</a>). The edits identify general patterns of suspect reporting of POA. The edits do not evaluate whether a valid POA value (e.g., Y or N) is appropriate for the specific diagnosis. There are three hospital-level edit checks:

- 1. Indication that a hospital has POA reported as Y on all diagnoses on all discharges
- 2. Indication that a hospital has POA reported as missing on all non-Medicare discharges
- 3. Indication that a hospital reported POA as missing on all nonexempt diagnoses for 15 percent or more of discharges. The cut-point of 15 percent was determined by 2 times the standard deviation plus the mean of the percentage for hospitals that are required to report POA to CMS.

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<sup>&</sup>lt;sup>1</sup> States in the 2016 reference population for the hospital-level indicators include: AR, AZ, CA, CO, DE, DC, FL, GA, HI, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, and WV.

Additional information on the reference population and the risk adjustment process may be found in Quality Indicator Empirical Methods, available on the AHRQ QI<sup>TM</sup> website (http://www.qualityindicators.ahrq.gov/modules/Default.aspx).

The QI observed rates for hospital-level indicators are scaled to the rate per 1,000 persons at risk. Cell sizes less than 11 are suppressed due to confidentiality; and are designated by an asterisk (\*). When only one data point in a series must be suppressed due to cell sizes, another data point is provided as a range to disallow calculation of the masked variable. In some cases, numerators, denominators or rates are not applicable for the category due to the exclusion criteria in the specification of the indicator, and are designated by dashes (--).

## **Acknowledgments**

The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID: Alaska State Hospital and Nursing Home Association, Arizona Department of Health Services, Arkansas Department of Health, California Office of Statewide Health Planning and Development, Colorado Hospital Association, Connecticut Hospital Association, Delaware Division of Public Health, District of Columbia Hospital Association, Florida Agency for Health Care Administration, Georgia Hospital Association, Hawaii Health Information Corporation, Illinois Department of Public Health, Indiana Hospital Association, Iowa Hospital Association, Kansas Hospital Association, Kentucky Cabinet for Health and Family Services, Louisiana Department of Health and Hospitals, Maine Health Data Organization, Maryland Health Services Cost Review Commission, Massachusetts Center for Health Information and Analysis, Michigan Health & Hospital Association, Minnesota Hospital Association (provides data for Minnesota and North Dakota), Mississippi Department of Health, Missouri Hospital Industry Data Institute, Montana MHA - An Association of Montana Health Care Providers, Nebraska Hospital Association, Nevada Department of Health and Human Services, New Hampshire Department of Health & Human Services, New Jersey Department of Health, New Mexico Department of Health, New York State Department of Health, North Carolina Department of Health and Human Services, North Dakota (data provided by the Minnesota Hospital Association), **Ohio** Hospital Association, **Oklahoma** State Department of Health, Oregon Association of Hospitals and Health Systems, Oregon Office of Health Analytics, Pennsylvania Health Care Cost Containment Council, Rhode Island Department of Health, South Carolina Revenue and Fiscal Affairs Office, South Dakota Association of Healthcare Organizations, Tennessee Hospital Association, Texas Department of State Health Services, Utah Department of Health, Vermont Association of Hospitals and Health Systems, Virginia Health Information, Washington State Department of Health, West Virginia Health Care Authority, Wisconsin Department of Health Services, Wyoming Hospital Association.

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Table 1. Inpatient Quality Indicators (IQI) For Overall Population: Provider-Level Indicators

INDICATOR	LABEL	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 (=OBSERVED RATE x 1,000)
IQI 8	Esophageal Resection Mortality Rate, per 1,000 Admissions	135	3,565	37.87
IQI 9	Pancreatic Resection Mortality Rate, per 1,000 Admissions	436	18,065	24.14
IQI 9 With Cancer	Pancreatic Resection Mortality Rate - Stratum With Cancer, per 1,000 Admissions	227	9,768	23.24
IQI 9 Without Cancer	Pancreatic Resection Mortality Rate - Stratum Without Cancer, per 1,000 Admissions	209	8,297	25.19
IQI 11	Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate, per 1,000 Admissions	1,369	37,256	36.75
IQI 11 Open Repair of Ruptured	Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Open Repair of Ruptured, per 1,000 Admissions	481	1,361	353.42
IQI 11 Open Repair of Unruptured	Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Open Repair of Unruptured, per 1,000 Admissions	266	4,792	55.51
IQI 11 Endovascular Repair of Ruptured	Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Endovascular Repair of Ruptured, per 1,000 Admissions	408	1,911	213.5
IQI 11 Endovascular Repair of Unruptured	Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Endovascular Repair of Unruptured, per 1,000 Admissions	214	29,192	7.33
IQI 12	Coronary Artery Bypass Graft (CABG) Mortality Rate, per 1,000 Admissions	4,497	188,523	23.85
IQI 15	Acute Myocardial Infarction (AMI) Mortality Rate, per 1,000 Admissions	28,927	567,685	50.96
IQI 16	Heart Failure Mortality Rate, per 1,000 Admissions	27,643	987,464	27.99

INDICATOR	LABEL	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 (=OBSERVED RATE x 1,000)
IQI 17	Acute Stroke Mortality Rate, per 1,000 Admissions	43,216	583,655	74.04
IQI 17 Subarachnoid Hemorrhage	Acute Stroke Mortality Rate - Stratum Subarachnoid Hemorrhage, per 1,000 Admissions	4,571	22,476	203.37
IQI 17 Intracerebral Hemorrhage	Acute Stroke Mortality Rate - Stratum Intracerebral Hemorrhage, per 1,000 Admissions	19,225	95,272	201.79
IQI 17 Ischemic Stroke	Acute Stroke Mortality Rate - Stratum Ischemic Stroke, per 1,000 Admissions	19,420	465,907	41.68
IQI 18	Gastrointestinal Hemorrhage Mortality Rate, per 1,000 Admissions	12,261	516,133	23.76
IQI 19	Hip Fracture Mortality Rate, per 1,000 Admissions	5,525	255,434	21.63
IQI 20	Pneumonia Mortality Rate, per 1,000 Admissions	18,157	669,082	27.14
IQI 21	Cesarean Delivery Rate - Uncomplicated, per 1,000 Admissions	939,099	3,207,441	292.79
IQI 22	Vaginal Birth After Cesarean (VBAC) Delivery Rate - Uncomplicated, per 1,000 Admissions	69,142	570,894	121.11
IQI 30	Percutaneous Coronary Intervention (PCI) Mortality Rate, per 1,000 Admissions	12,257	436,238	28.1
IQI 31	Carotid Endarterectomy Mortality Rate, per 1,000 Admissions	279	71,582	3.9
IQI 32	Acute Myocardial Infarction (AMI) Mortality Rate - w/o Transfer Cases, per 1,000 Admissions	23,723	460,863	51.48
IQI 33	Primary Cesarean Delivery Rate - Uncomplicated, per 1,000 Admissions	438,922	2,636,547	166.48
IQI 34	Vaginal Birth After Cesarean (VBAC) Rate - All, per 1,000 Admissions	76,048	633,440	120.06

<sup>--</sup> Intentionally blank

## **Provider-Level Indicators**

Table 14. IQI 08 - Esophageal Resection Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	135	3,565	37.87
Females	27	648	41.67
Males	108	2,917	37.02
18 to 39 years	****	49	****
40 to 64 years	32 - 41	1,723	18.57 - 23.80
65 to 74 years	57	1,321	43.15
75+ years	37	472	78.39
Private	30	1,424	21.07
Medicare	88	1,699	51.8
Medicaid	****	291	****
Other	****	109	****
Uninsured (self-pay/no charge)	****	42	****

<sup>\*\*\*\*</sup> Obscured due to small sample size

**Table 15. IQI 09 - Pancreatic Resection Mortality Rate** 

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	436	18,065	24.14
Females	163	9,049	18.01
Males	273	9,016	30.28
18 to 39 years	46	1,358	33.87
40 to 64 years	137	7,747	17.68
65 to 74 years	128	5,637	22.71
75+ years	125	3,323	37.62
Private	124	6,870	18.05
Medicare	247	8,603	28.71
Medicaid	32	1,647	19.43
Other	13	529	24.57
Uninsured (self-pay/no charge)	20	416	48.08

Table 16. IQI 9 With Cancer - Pancreatic Resection Mortality Rate - Stratum With Cancer

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	227	9,768	23.24
Females	96	4,698	20.43
Males	131	5,070	25.84
18 to 39 years	****	202	****
40 to 64 years	57 - 66	3,727	15.29 - 17.71
65 to 74 years	83	3,504	23.69
75+ years	86	2,335	36.83
Private	57	3,274	17.41
Medicare	156	5,397	28.9

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Medicaid	****	652	****
Other	****	258	****
Uninsured (self-pay/no charge)	****	187	****

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 17. IQI 9 Without Cancer - Pancreatic Resection Mortality Rate - Stratum Without Cancer

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	209	8,297	25.19
Females	67	4,351	15.4
Males	142	3,946	35.99
18 to 39 years	45	1,156	38.93
40 to 64 years	80	4,020	19.9
65 to 74 years	45	2,133	21.1
75+ years	39	988	39.47
Private	66 - 75	3,596	18.35 - 20.86
Medicare	91	3,206	28.38
Medicaid	25	995	25.13
Other	****	271	****
Uninsured (self-pay/no charge)	18	229	78.6

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 18. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	1,369	37,256	36.75
Females	383	7,905	48.45
Males	986	29,351	33.59
18 to 39 years	****	54	****
40 to 64 years	190 - 199	6,217	30.56 - 32.01
65 to 74 years	432	14,629	29.53
75+ years	738	16,356	45.12
Private	161	5,932	27.14
Medicare	1,090	29,006	37.58
Medicaid	55	1,131	48.63
Other	27	846	31.91
Uninsured (self-pay/no charge)	36	341	105.57

<sup>\*\*\*\*</sup> Obscured due to small sample size

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Table 19. IQI 11 Open Repair of Ruptured - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Open Repair of Ruptured

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	481	1,361	353.42
Females	127	314	404.46
Males	354	1,047	338.11
18 to 39 years	****	****	****
40 to 64 years	72 - 81	307 - 316	234.53 - 256.33
65 to 74 years	154	497	309.86
75+ years	242	542	446.49
Private	61	232	262.93
Medicare	368	966	380.95
Medicaid	25	70	357.14
Other	12	45	266.67
Uninsured (self-pay/no charge)	15	48	312.5

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 20. IQI 11 Open Repair of Unruptured - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Open Repair of Unruptured

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	266	4,792	55.51
Females	84	1,374	61.14
Males	182	3,418	53.25
18 to 39 years	****	24	****
40 to 64 years	42 - 51	1,285	32.68 - 39.69
65 to 74 years	96	2,085	46.04
75+ years	122	1,398	87.27
Private	32	1,024	31.25
Medicare	207	3,284	63.03
Medicaid	17	259	65.64
Other	****	174	****
Uninsured (self-pay/no charge)	****	51	****

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 21. IQI 11 Endovascular Repair of Ruptured - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Endovascular Repair of Ruptured

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	408	1,911	213.5
Females	102	434	235.02
Males	306	1,477	207.18
18 to 39 years	****	****	****
40 to 64 years	45 - 54	371 - 380	121.29 - 142.11
65 to 74 years	117	603	194.03
75+ years	236	930	253.76
Private	53	310	170.97

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Medicare	326	1,436	227.02
Medicaid	****	73	****
Other	****	44	****
Uninsured (self-pay/no charge)	13	48	270.83

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 22. IQI 11 Endovascular Repair of Unruptured - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum Endovascular Repair of Unruptured

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	214	29,192	7.33
Females	70	5,783	12.1
Males	144	23,409	6.15
18 to 39 years	****	18	****
40 to 64 years	16-Jul	4,244	1.65 - 3.77
65 to 74 years	65	11,444	5.68
75+ years	138	13,486	10.23
Private	15	4,366	3.44
Medicare	189	23,320	8.1
Medicaid	****	729	****
Other	****	583	****
Uninsured (self-pay/no charge)	****	194	****

<sup>--</sup> Indicates Not Applicable

Table 23. IQI 12 - Coronary Artery Bypass Graft (CABG) Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	4,497	188,523	23.85
Females	1,720	47,754	36.02
Males	2,777	140,769	19.73
40 to 64 years	1,190	76,864	15.48
65 to 74 years	1,636	69,990	23.37
75+ years	1,671	41,669	40.1
Private	783	56,583	13.84
Medicare	3,231	107,210	30.14
Medicaid	273	14,088	19.38
Other	105	5,594	18.77
Uninsured (self-pay/no charge)	105	5,048	20.8

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Table 26. IQI 15 - Acute Myocardial Infarction (AMI) Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	28,927	567,685	50.96
Females	12,194	215,883	56.48
Males	16,733	351,802	47.56
18 to 39 years	222	12,976	17.11
40 to 64 years	6,406	233,409	27.45
65 to 74 years	7,138	143,641	49.69
75+ years	15,161	177,659	85.34
Private	3,920	146,881	26.69
Medicare	21,323	323,912	65.83
Medicaid	1,803	52,834	34.13
Other	834	16,619	50.18
Uninsured (self-pay/no charge)	1,047	27,439	38.16

Table 27. IQI 16 - Heart Failure Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	27,643	987,464	27.99
Females	13,146	479,528	27.41
Males	14,497	507,936	28.54
18 to 39 years	322	24,667	13.05
40 to 64 years	3,841	265,347	14.48
65 to 74 years	5,314	220,365	24.11
75+ years	18,166	477,085	38.08
Private	3,069	110,358	27.81
Medicare	21,649	728,522	29.72
Medicaid	1,421	102,126	13.91
Other	1,086	18,862	57.58
Uninsured (self-pay/no charge)	418	27,596	15.15

Table 28. IQI 17 - Acute Stroke Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	43,216	583,655	74.04
Females	22,774	293,316	77.64
Males	20,442	290,339	70.41
18 to 39 years	1,089	16,262	66.97
40 to 64 years	11,141	186,514	59.73
65 to 74 years	8,864	137,469	64.48
75+ years	22,122	243,410	90.88
Private	7,359	115,234	63.86
Medicare	28,120	372,833	75.42
Medicaid	3,805	56,124	67.8
Other	1,877	14,801	126.82

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Uninsured (self-pay/no charge)	2,055	24,663	83.32

Table 29. IQI 17 Subarachnoid Hemorrhage - Acute Stroke Mortality Rate - Stratum Subarachnoid Hemorrhage

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000)
Overall	4,571	22,476	203.37
Females	2,855	13,854	206.08
Males	1,716	8,622	199.03
18 to 39 years	326	2,205	147.85
40 to 64 years	1,974	11,639	169.6
65 to 74 years	990	4,252	232.83
75+ years	1,281	4,380	292.47
Private	1,239	8,056	153.8
Medicare	2,127	8,622	246.69
Medicaid	651	3,444	189.02
Other	176	807	218.09
Uninsured (self-pay/no charge)	378	1,547	244.34

Table 30. IQI 17 Intracerebral Hemorrhage - Acute Stroke Mortality Rate - Stratum Intracerebral Hemorrhage

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	19,225	95,272	201.79
Females	9,395	43,209	217.43
Males	9,830	52,063	188.81
18 to 39 years	542	3,596	150.72
40 to 64 years	5,550	30,663	181
65 to 74 years	4,104	21,734	188.83
75+ years	9,029	39,279	229.87
Private	3,192	18,856	169.28
Medicare	12,365	59,004	209.56
Medicaid	1,874	10,308	181.8
Other	737	2,739	269.08
Uninsured (self-pay/no charge)	1,057	4,365	242.15

Table 31. IQI 17 Ischemic Stroke - Acute Stroke Mortality Rate - Stratum Ischemic Stroke

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	19,420	465,907	41.68
Females	10,524	236,253	44.55
Males	8,896	229,654	38.74
18 to 39 years	221	10,461	21.13
40 to 64 years	3,617	144,212	25.08

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65 to 74 years	3,770	111,483	33.82
75+ years	11,812	199,751	59.13
Private	2,928	88,322	33.15
Medicare	13,628	305,207	44.65
Medicaid	1,280	42,372	30.21
Other	964	11,255	85.65
Uninsured (self-pay/no charge)	620	18,751	33.06

**Table 32. IQI 18 - Gastrointestinal Hemorrhage Mortality Rate** 

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	12,261	516,133	23.76
Females	5,082	244,238	20.81
Males	7,179	271,895	26.4
18 to 39 years	298	33,926	8.78
40 to 64 years	3,711	161,871	22.93
65 to 74 years	2,472	113,460	21.79
75+ years	5,780	206,876	27.94
Private	1,667	91,872	18.14
Medicare	8,223	332,092	24.76
Medicaid	1,500	58,714	25.55
Other	372	12,096	30.75
Uninsured (self-pay/no charge)	499	21,359	23.36

**Table 33. IQI 19 - Hip Fracture Mortality Rate** 

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	5,525	255,434	21.63
Females	3,226	181,991	17.73
Males	2,299	73,443	31.3
65 to 74 years	590	50,721	11.63
75+ years	4,935	204,713	24.11
Private	312	14,210	21.96
Medicare	5,031	234,000	21.5
Medicaid	42	2,428	17.3
Other	108	3,561	30.33
Uninsured (self-pay/no charge)	32	1,235	25.91

Table 34. IQI 20 - Pneumonia Mortality Rate

INDICATOR	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	18,157	669,082	27.14
Females	9,059	355,981	25.45
Males	9,098	313,101	29.06

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18 to 39 years	257	47,357	5.43
40 to 64 years	3,038	200,136	15.18
65 to 74 years	3,747	143,344	26.14
75+ years	11,115	278,245	39.95
Private	2,254	112,486	20.04
Medicare	14,038	450,654	31.15
Medicaid	954	72,080	13.24
Other	682	13,499	50.52
Uninsured (self-pay/no charge)	229	20,363	11.25

Table 35. IQI 21 - Cesarean Delivery Rate - Uncomplicated

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	939,099	3,207,441	292.79
Females	939,099	3,207,441	292.79
0 to 17 years	7,347	47,409	154.97
18 to 39 years	890,212	3,066,679	290.29
40 to 64 years	41,540	93,353	444.98
Private	485,053	1,638,320	296.07
Medicare	8,482	23,395	362.56
Medicaid	397,115	1,371,879	289.47
Other	25,692	94,452	272.01
Uninsured (self-pay/no charge)	22,757	79,395	286.63

Table 36. IQI 22 - Vaginal Birth After Cesarean (VBAC) Delivery Rate - Uncomplicated

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	69,142	570,894	121.11
Females	69,142	570,894	121.11
0 to 17 years	95	558	170.25
18 to 39 years	66,260	543,955	121.81
40 to 64 years	2,787	26,381	105.64
Private	33,576	274,498	122.32
Medicare	467	5,288	88.31
Medicaid	30,728	260,029	118.17
Other	2,267	15,995	141.73
Uninsured (self-pay/no charge)	2,104	15,084	139.49

Table 40. IQI 30 - Percutaneous Coronary Intervention (PCI) Mortality Rate

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	12,257	436,238	28.1
Females	4,731	143,838	32.89
Males	7,526	292,400	25.74
40 to 64 years	3,572	206,246	17.32

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65 to 74 years	3,602	123,123	29.26
75+ years	5,083	106,869	47.56
Private	2,083	127,976	16.28
Medicare	8,528	234,718	36.33
Medicaid	837	39,816	21.02
Other	271	13,162	20.59
Uninsured (self-pay/no charge)	538	20,566	26.16

**Table 41. IQI 31 - Carotid Endarterectomy Mortality Rate** 

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	279	71,582	3.9
Females	120	29,293	4.1
Males	159	42,289	3.76
18 to 39 years	****	66	****
40 to 64 years	45 - 54	16,901	2.66 - 3.20
65 to 74 years	109	28,361	3.84
75+ years	122	26,254	4.65
Private	37	13,071	2.83
Medicare	220	52,957	4.15
Medicaid	14	3,461	4.05
Other	****	1,193	****
Uninsured (self-pay/no charge)	****	900	****

<sup>\*\*\*\*</sup> Obscured due to small sample size

Table 42. IQI 32 - Acute Myocardial Infarction (AMI) Mortality Rate - w/o Transfer Cases

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	23,723	460,863	51.48
Females	10,225	177,527	57.6
Males	13,498	283,336	47.64
18 to 39 years	178	10,644	16.72
40 to 64 years	5,090	188,500	27
65 to 74 years	5,627	113,598	49.53
75+ years	12,828	148,121	86.6
Private	3,128	118,765	26.34
Medicare	17,596	263,535	66.77
Medicaid	1,511	43,315	34.88
Other	635	12,430	51.09
Uninsured (self-pay/no charge)	853	22,818	37.38

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Table 43. IQI 33 - Primary Cesarean Delivery Rate - Uncomplicated

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	438,922	2,636,547	166.48
Females	438,922	2,636,547	166.48
0 to 17 years	6,886	46,851	146.98
18 to 39 years	414,049	2,522,724	164.13
40 to 64 years	17,987	66,972	268.57
Private	244,790	1,363,822	179.49
Medicare	3,672	18,107	202.79
Medicaid	168,603	1,111,850	151.64
Other	11,992	78,457	152.85
Uninsured (self-pay/no charge)	9,865	64,311	153.4

Table 44. IQI 34 - Vaginal Birth After Cesarean (VBAC) Rate - All

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 1000 ADMISSIONS (=OBSERVED RATEx1000)
Overall	76,048	633,440	120.06
Females	76,048	633,440	120.06
0 to 17 years	116	624	185.9
18 to 39 years	72,725	602,343	120.74
40 to 64 years	3,207	30,473	105.24
Private	36,241	303,024	119.6
Medicare	564	6,042	93.35
Medicaid	34,421	289,806	118.77
Other	2,466	17,834	138.28
Uninsured (self-pay/no charge)	2,356	16,734	140.79

#### **Area-Level Indicators**

Table 46. IQI 26 - Coronary Artery Bypass Graft (CABG) Rate

INDICATOR	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	163,571	136,013,058	120.26
Females	43,472	71,486,024	60.81
Males	120,099	64,527,034	186.12
40 to 64 years	66,561	95,139,561	69.96
64 to 74 years	57,433	23,037,209	249.31
75+ years	39,577	17,836,288	221.89

Table 47. IQI 27 - Percutaneous Coronary Intervention (PCI) Rate

INDICATOR	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	409,102	136,017,335	300.77
Females	134,581	71,487,242	188.26
Males	274,521	64,530,093	425.42

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40 to 64 years	196,768	95,140,563	206.82
64 to 74 years	112,890	23,038,457	490.01
75+ years	99,444	17,838,315	557.47

# Table 48. IQI 28 - Hysterectomy Rate

INDICATOR	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	182,045	112,880,740	161.27
Females	182,045	112,880,740	161.27
18 to 39 years	36,579	41,394,222	88.37
40 to 64 years	126,771	48,544,068	261.15
64 to 74 years	13,627	12,263,686	111.12
75+ years	5,068	10,678,764	47.46

# Table 49. IQI 29 - Laminectomy or Spinal Fusion Rate

INDICATOR	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000)
Overall	513,543	219,826,188	233.61
Females	260,561	112,881,939	230.83
Males	252,982	106,944,249	236.56
18 to 39 years	56,866	83,810,419	67.85
40 to 64 years	271,962	95,140,628	285.85
64 to 74 years	120,997	23,038,157	525.2
75+ years	63,718	17,836,984	357.22

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